Question 17. A unit is subject to a newly-promulgated MACT standard. The unit is part of a facility that is subject to title V (and has a part 70 permit) because the facility emits a criteria pollutant above the major source threshold. Is the unit exempt from the CAM rule, even if the MACT does not require monitoring for the criteria pollutant that makes the facility a major source?

Response 17. The CAM rule exemption for MACT <u>rules</u> applies only to monitoring for those MACT emission limits. That is, the CAM rule imposes no additional monitoring on the emission unit for showing compliance with MACT limits. This exemption does not extend to monitoring for compliance with other limitations that may also apply to that unit. However, the MACT monitoring may satisfy CAM requirements. This may often be the case when the MACT requires particulate or VOC control measures and the criteria pollutant is particulate or VOC. Note that the source owner must make this determination initially and indicate in the permit application that the existing monitoring satisfies CAM or propose additional monitoring to meet the CAM requirements for monitoring for compliance with the criteria pollutant limit.

Question 18. A source owner has submitted a permit application before April 20, 1998 and has received a completeness determination but no title V permit. If, before a permit is issued, a source owner makes a change that involves a large PSEU (a unit whose post control emissions exceed the major source threshold) and that would be considered significant under part 70 if a permit had been issued, would the large PSEU be subject to the CAM rule?

Response 18. Yes, the large PSEU would become subject to the CAM rule if the change could potentially affect the unit's compliance status and if the change is owner-initiated. Not all changes that would require a significant permit revision trigger CAM rule applicability. The types of changes that could trigger CAM rule applicability include source owner- or operator-initiated physical changes such as increasing production rate, changing to a new fuel or raw material, adding a new process line or control device, increasing the load on the control device by routing additional process exhaust to it, changing the control device, installing new monitoring systems, or changing process or weight rates. Note that submission of supplementary facts, corrected information, or additional information as to new requirements, as those terms are used in 40 CFR sections 70.5(a)(2) and 70.5(b), after receipt of a completeness determination would not trigger CAM rule applicability.

Question 19. New Source Performance Standards (NSPS) usually refer to a unit's design capacity, not to a unit's potential to emit. For CAM rule applicability purposes, is a unit's design capacity (as expressed in an NSPS promulgated before 11/15/90) irrelevant except as it relates to calculating the unit's potential to emit?

Response 19. The CAM rule relies on part 70's definition of potential to emit, as given in section 70.2. Note that design capacity as defined by a rule (e.g., NSPS) probably has limited usefulness in determining potential to emit. In addition, note that the CAM rule applicability process is not intended to establish a hierarchy based on design capacity or any other factor.

Question 20. Do fugitive emissions count towards a PSEU's potential to emit?

Response 20. Fugitive emissions count toward potential to emit in the same manner used for making title V applicability determinations. This means that, in general, fugitive emissions are not considered unless the major source belongs to one of twenty-seven categories of stationary source. See the definitions of the terms "Fugitive emissions," "Major source," and "Potential to emit" given in 40 CFR section 70.2. If fugitive emissions are included in the title V applicability determination, then they count towards a PSEU's potential to emit. Otherwise, they do not count towards a PSEU's potential to emit.

Question 21. Will emission units subject only to process weight rate limitations be subject to the CAM rule?

Response 21. Yes, these units <u>would</u> be subject to the CAM rule if the other CAM applicability criteria, given below, are met:

- a. the unit must be located at a major source subject to a Title V permit,
- b. the unit must have a control device necessary to meet the process weight rate limit,
 and
 - c. the pre-control device emissions of the regulated pollutant must exceed or be equivalent to the major source size threshold.

Question 22. A PSEU with a control device has potential fugitive emissions. In order to determine whether the PSEU is large or other, would one exclude or include the amount of fugitive emissions from the control device?

Response 22. The calculation of pre-control emissions for determining CAM rule applicability is based on the total emissions of the regulated pollutant from the affected unit. The calculation can, and most frequently will, be based on emission factors. This means that pre-control emissions are to include all potential emissions including any fugitive emissions not captured by the control device. Note that source owners or permitting authorities are not expected to conduct emission testing for CAM rule applicability purposes; they only need to remove the design efficiency of the control device from the calculation of the applicable unit's potential to emit. See 62 FR 54914.

Question 23. Can a video or infrared camera substitute for a thermocouple for detecting the presence of a pilot flame?

Response 23. Use of a video camera, by itself, is not a good substitute for detecting the presence of a pilot flame. Note that the Office of Enforcement and Compliance Assurance has given approval for alternative monitoring which included a thermocouple to monitor the flame and a "closed circuit camera" to provide 24 hour surveillance of a steam-assisted flare system. The Emissions Measurement Center (EMC) is reviewing a similar monitoring approach to determine if it can be used to meet the CAM requirements. That approach involves both a thermocouple, which would provide indication of flame presence, and a video camera, which would monitor visible emissions. The review should be completed and available in a few months. Use of an infrared camera to detect the presence of a flame is an option worth pursuing; the EMC will review any proposal of such monitoring.

Question 24. What is the status of the legal challenge to the CAM rule?

Response 24. The Court granted industry's request for a delay in the CAM rule challenge briefing schedule until after the decision in the credible evidence rule case. Since the Agency received a decision on the credible evidence rule case on August 14, 1998, one can expect the CAM rule case to be briefed and argued over the fall and winter. Meanwhile, the CAM rule remains in effect.

Question 25. A permitting authority already has full approval for its part 70 program. What is the deadline for the permitting authority to make the part 70 revisions that accompanied promulgation of the CAM rule?

Response 25. As mentioned in Response 10, while all programs will need to be revised to incorporate the part 70 changes that accompanied the CAM rule, permitting authorities have flexibility as to when those changes must occur. Permitting authorities can make the changes in accordance with the existing program revision procedures given in section 70.4(i). Permitting authorities with interim approval can submit the requisite changes as part of their full approval package. Permitting authorities can also wait to submit the changes in conjunction with the changes contained in the upcoming revisions to section 70.7. The Agency expects all changes due to its rulemaking to be competed on or before the revisions to section 70.7 are done.

Question 26. Is the Agency conducting any studies to develop a technical illustration for an electrostatic precipitator?

Response 26. No. While the Agency is not conducting any studies to develop an example for an electrostatic precipitator, the Agency plans on obtaining information from an Electric Power Research Institute (EPRI) study of electrostatic precipitators. In early June, EPRI is initiating its study of equipment performance relative to compliance. The study may also include installation and testing of particulate matter continuous emissions monitoring systems.

Question 27. A source owner has submitted its title V application and received its completeness determination before April 20, 1998, so that the large size PSEU does not require CAM plan submittal at time of application submittal. During the permit negotiations, the permitting authority requests that the monitoring be changed to the extent that it would be considered a significant revision. Does the significant revision trigger CAM Plan submittal for the large size PSEU?

Response 27. As mentioned in Response 18, this proposed permit revision would not trigger CAM requirements because the change request was initiated by the permitting authority, not the source.

Question 28. A permitting authority requests source owners not to include CAM plan interim monitoring details in the initial applications until periodic monitoring guidance is issued by EPA. After the periodic monitoring guidance is issued, does the updating of permit applications with monitoring information trigger CAM plan submittal of applicable large size PSEUs?

Response 28. As mentioned in Response 18, updating of permit applications (i.e., submitting supplementary facts) due to permitting authority-initiated changes does not trigger CAM applicability of large PSEUs. Note that if a source owner has a complete permit application by April 20, 1998, the source owner need not address CAM requirements until the applicability date given in the rule. In the meantime, source owners or operators and permitting authorities can use CAM principles or other monitoring to satisfy part 70 periodic monitoring requirements, consistent with the Agency's periodic monitoring guidance.

Question 29. An owner of a source submits a part 70 permit application update containing a change to a large PSEU that would constitute a significant permit revision if a part 70 permit had been issued; however, the change would not affect the interim monitoring for that PSEU. Without the owner initiated change, the PSEU would have become subject to the CAM rule at permit renewal. Does an owner-initiated change which would require use of the part 70 significant revision process but that has no impact on monitoring for a large PSEU trigger CAM rule applicability?

Response 29. As mentioned in Response 18, not all changes that would require a significant permit revision trigger CAM rule applicability. The Agency plans on issuing a separate piece of guidance to identify those changes that would trigger CAM applicability. In general, the changes that are owner-initiated and that would potentially affect compliance or compliance determination (i.e., monitoring) would include changes such as adding a new unit, increasing production rate, changing fuel or raw material composition, modifying the monitoring technique, adding a new process line or control device, increasing the load on the control device by routing additional process exhaust to it, changing the control device, changing monitoring systems, or changing to process or weight rates. Note that while changes initiated by permitting authorities may require application and/or permit revisions, those changes do not trigger CAM applicability.

Question 30. A PSEU has a continuous emission monitoring system (CEMS) for nitrogen oxides, and the CEMS collects a data point every fifteen minutes. The underlying standard for nitrogen oxides lacks a data averaging period. Given that the monitoring frequency is four times per hour and that the data averaging period is not addressed, does one assume that the CEMS provides intermittent monitoring and that the standard requires instantaneous compliance?

Response 30. This hypothetical situation seems unlikely. First, CEMS operating in accordance with requirements in 40 CFR 60.13 and PS-2, i.e., providing a data point at least every fifteen minutes, supply data on a frequency consistent with the frequency established by the Agency for a continuous monitoring system. See 62 FR 54922. Second, few, if any, nitrogen oxides emissions limits exist that do not rely on a default data averaging period which is based on a "3-hour" average required by Method 7 (or 7E) performance testing. Appropriate monitoring for the hypothetical situation becomes apparent once the permit applicant or permitting authority identifies (as required by the periodic monitoring requirement of part 70 or 71) an averaging time consistent with the compliance limit.

Question 31. Consider a PSEU which uses a CEMS for monitoring nitrogen oxides emissions. The nitrogen oxides emissions limit has a two-hour averaging period. Since the CEMS collects data every fifteen minutes and since the monitoring frequency is well within the data averaging period, does the CEMS provide continuous monitoring?

Response 31. As mentioned in Response 30, a CEMS operated in accordance with the requirements of 40 CFR 60.13 and PS-2 yields continuous data. Since the frequency of data collection is compatible with the averaging time of the nitrogen oxides emission limit, the CEMS provide continuous monitoring.

Question 32. A boiler has a volatile organic compound emissions limit with a three-hour data averaging period. The boiler collects data from an operating parameter once per hour. Would such monitoring represent continuous monitoring for non-large PSEUs? Given that the CAM rule requires a data collection frequency of at least every fifteen minutes for large PSEUs, would such monitoring represent continuous monitoring for large PSEUs?

Response 32. Since 40 CFR 64.3(b)(4)(i) requires data collection frequency intervals to be commensurate with the time period over which a change in control device performance that would require actions by the owner or operator to return operations within normal ranges or designated conditions is likely to be observed and since a data collection frequency of once per hour appears compatible with a three-hour data averaging period and with the minimum data collection frequency of once per day required for non-large PSEUs, such monitoring could represent continuous monitoring for non-large PSEUs. However, since the data collection frequency of once per hour is not compatible with the minimum data collection frequency of at least every fifteen minutes required for large PSEUs, such monitoring would not represent continuous monitoring for large PSEUs, nor would it comply with CAM.

Question 33. A boiler has a volatile organic compound emissions limit with a data averaging period of four hours. A permit applicant proposes to monitor an operational parameter once per day, since the PSEU is not large. Would such monitoring represent intermittent monitoring because its frequency is not within the data averaging period?

Response 33. If one assumes that the data averaging period is established in the rule, then the monitoring frequency of once per day is insufficient for CAM purposes. Note that the CAM rule establishes minimum monitoring frequencies, meaning that those frequencies must be increased as necessary to be compatible with emission averaging times. One data point per day (and a daily average) may be sufficient depending on the control device, margin of compliance, particularly when the frequency is commensurate with the time period over which a change in control device performance that would require actions by the owner or operator to return operations within normal ranges or designated conditions is likely to be observed. See 40 CFR 64.3(b)(4)(i).